# Lifecycle Upkeep Sustainment Intelligence (LUSI™)

**A leading security classified collaboration hub [PROTECTED] for class specific vessels, delivering reliable availability, driven by an intuitive and innovative sustainment operational intelligence layer.**

AUSTAL TECHNOLOGY · LUSI

## Major Client Challenges: Resolved

- Legacy Data Foundation
- Unstructured Information from Complex Data Taxonomies
- Security Vulnerabilities in Obsolete Applications
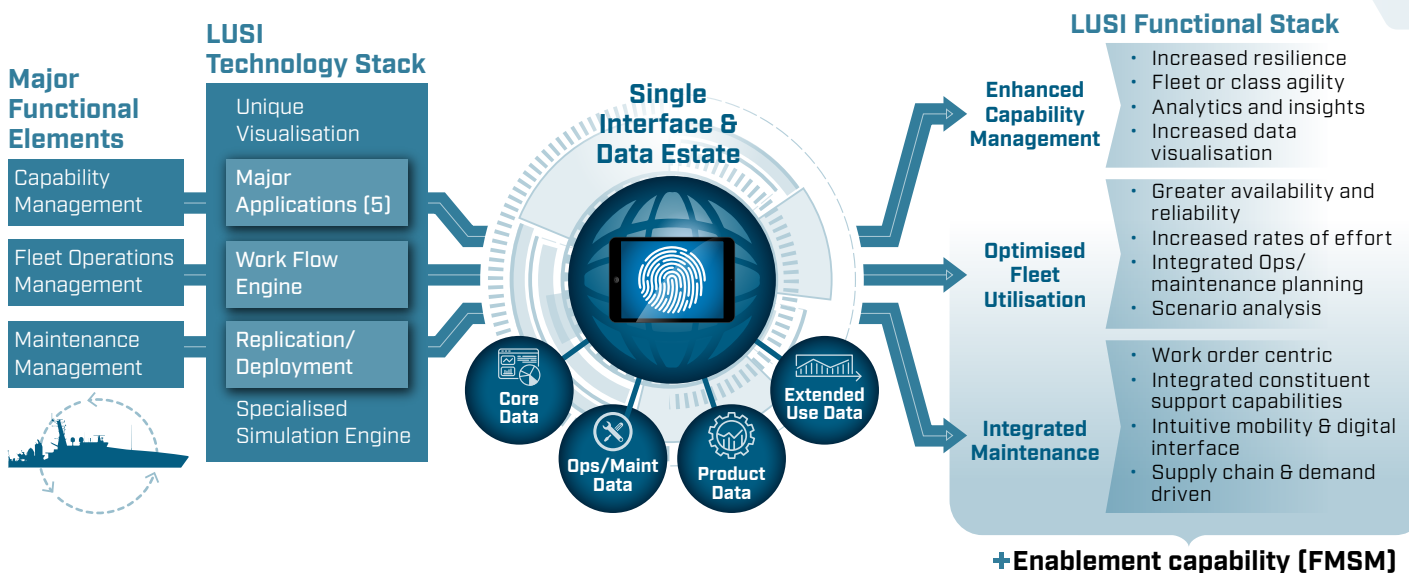- Lack of Connected, Synchronised Operational Data
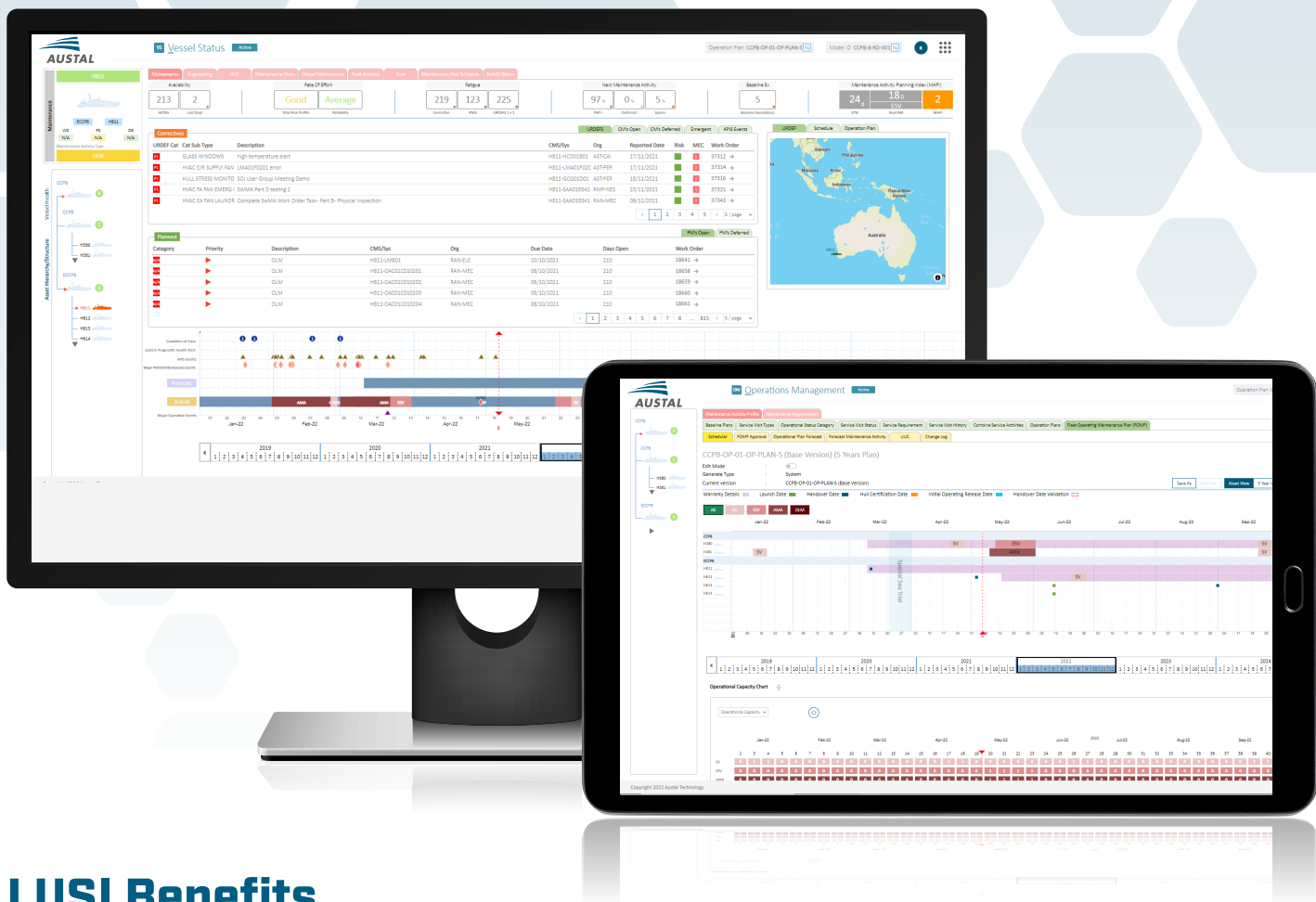- Limited Vessel & Fleet Intelligence
- Disconnected Lifecycle Management

## LUSI embodies the future of maritime sustainment:

- ✓ Addressing the inter-relationships within its ecosystem, by seamlessly integrating Capability, Fleet Operations and Maintenance Management functions into a single platform.
- ✓ Providing powerful analytics for enterprise participants via a 'single interface & data estate'.
- ✓ Elevates data acquisition and management, transforming it into real-time intelligence for comprehensive asset and fleet oversight.
- ✓ Ensures data structure integrity and security in highly transactional settings,
- ✓ A robust foundation that enables the future harnessing of advanced data services such as AI and ML.
- ✓ **Reliable and real-time ship to shore synchronous communications.**

### Major Functional Elements
- Capability Management
- Fleet Operations Management
- Maintenance Management

### LUSI Technology Stack
- Unique Visualisation
- Major Applications [5]
- Work Flow Engine
- Replication/ Deployment
- Specialised Simulation Engine

### Single Interface & Data Estate
- Core Data
- Ops/Maint Data
- Product Data
- Extended Use Data

### LUSI Functional Stack

**Enhanced Capability Management**
- Increased resilience
- Fleet or class agility
- Analytics and insights
- Increased data visualisation

**Optimised Fleet Utilisation**
- Greater availability and reliability
- Increased rates of effort
- Integrated Ops/ maintenance planning
- Scenario analysis

**Integrated Maintenance**
- Work order centric
- Integrated constituent support capabilities
- Intuitive mobility & digital interface
- Supply chain & demand driven

**+Enablement capability (FMSM)**

# LUSI Benefits

**Offering a suite of innovative features that drive unparalleled benefits. Central to its design is the capability to transform data into meaningful, actionable insights, elevating fleet management from individual assets to a comprehensive fleet perspective.**

- **Cognitive Advantage:** By democratising transactional data, it ensures coherent fleet planning, and optimises individual vessel health.

- **Enhanced Decision Making:** Through its sustainment analytics and visualisation, LUSI guarantees real-time vessel readiness, promoting seaworthiness and streamlined availability.

- **Modern Data Handling:** With its next-gen applications, it overcomes outdated data constraints, harnessing Digital 4.0 technologies to minimise data inconsistencies.

- **Strategic Fleet Management:** Integrated planning tools, specifically Austal Technology's LUSI engine, ensures fleet readiness and individual vessel availability aligned with the Fleet Operational Management Plan.

# Contact details

**Rod Bird**
**Head Austal Technology - Austal Australia**

**p:** +61 8 9410 1111 | **m:** +61 448 000 939 | **e:** rod.bird@austal.com | **w:** www.austal.com